

KONONOV, K., master sporta

Technic of pulling the trigger. Voen. znan. 37 no.11:28-29 N  
'61. (MIRA 14:11)  
(Pistol shooting)

24,4200

S/145/62/000/004/002/002  
0262/D308

AUTHORS: Gokhfel'd, D.A., Candidate of Technical Sciences,  
Docent, and Kononov, K.M., Aspirant

TITLE: Adaptability of unevenly heated rotating discs

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy Mashinos-  
troeniye, no. 4, 1962, 85 - 91

TEXT: Flat discs with a small central hole are considered,  
the study being a continuation of an earlier work by the same author. In the calculations the changes in the yield point at increased temperatures are taken into account. The effect of the disc speed and the diameter of the hole on the flexibility temperature is also analyzed and the conditions at which heat cycles will cause alternating or increasing plastic deformations are defined. There are 7 figures. ✓B

ASSOCIATION: Chelyabinskiy politekhnicheskii institut (Chelyabinsk  
Polytechnic Institute)

Card 1/2

Adaptability of unevenly ...

5/14-5/62/000/004/002/002  
0262/0308

SUBMITTED: July 5, 1961

/B

Card. 2/2

1 32283-65 EWT(m)/EWP(w)/EWA(d)/EWP(v)/EPR/T/EWP(+)/EWP(-)/EWP(L) P2-1

15 EX 65

NR AFS 825

SECRET

AUTHOR: Kononov, K. M. (Chelyabinsk)

TITLE: Full-scale tests of the runners of centripetal gas turbines under conditions of multiple starting

SOURCE: Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh konstruktsii. Teplovyye napryazheniya v elementakh konstruktsii (Thermal stresses in construction elements), doklady soveshchaniya, no. 4, Kiev, Naukova dumka, 1981, 111 p.

TOPIC TAGS: gas turbine, centripetal gas turbine, gas turbine runner, runner thermal stress, thermal fatigue, austenitic steel fatigue

ABSTRACT: At present, the use of centripetal gas turbines is steadily widening, being extended to turbocompressors driven by exhaust gases and designed for supercharging internal combustion engines. During the operation of examples of the 12K-11 turbocompressor set on tractor engines, the turbine runner wheels failed. Cracks were observed at the edge after 2,000-2,300 hours of turbocompressor operation and the wheel edge was warped towards the side opposite the blade. The turbine

L 19283-65

SESSION NR: AT5000826

3  
6  
The runner is a casting of EI-572 austenitic steel, which shows high thermal stresses due to its elongation and low heat transmission. It was found that the cracks were caused by thermal fatigue. The tests were made to determine the life of the turbine. The turbine was driven by the exhaust gases from a VK-1 engine. The temperature before the engine was increased to 400 K and the rotor had a speed of 1000 rpm for 7 minutes for acceleration; the engine ran at a stable speed for 10 minutes, then the combustion chamber was closed and the turbocompressor was run for 12 minutes with air blowing in at 100 K. The turbocompressor was closed, and the runner was inspected for cracks and measured both before and after the tests. It was found that the runner had cracks that had spread together at the base of the blades, while the edge became wider. The cracks were observed at the base of the turbine. The tests were made at a lower speed and faster cooling by water. After 10 such tests, a crack appeared with a length of 5 mm between the blades (between the blades and the wheel rim). Besides multiple starting tests, the immobile runner was heated by high-frequency currents with the center cooled by water. Cracks appeared in the thin part after 10 cycles. The tests confirmed the described breakdown of different runners of the VK-1 turbocompressor.

Card 2/3

1. 59283-65

ACCESSION NR: AT5000826

are similar to those appearing during operation. A wide program of investigation  
is planned for determining the temperature fields, thermal stress in  
and the strength of EI-572 steel during heating-cooling cycles. Orig.  
has 5 figures.

ASSOCIATION: None

SUBMITTED: 02 Jun 64

ENCL: 00

SUB CODE: PR

NO REF SOV: 000

OTHER: 000

Card 3/3

KONONOV, K.M., starshiy prepodavatel'

Investigating the wheel strength of a radial-flow gas turbine under  
unsteady thermal conditions. Izv. vys. ucheb. zav.; mashinostr.  
no.4:54-60 '65. (MIRA 18:5)

L 24460-66 ENT(m)/ENP(f)/EPF(n)-2/ENA(d)/T-2/ENP(t)/ETC(m)-6 IJP(c) JD/KW/GS

ACC NR: AT6008677

(N)

SOURCE CODE: UR/0000/65/000/000/0317/0323

AUTHOR: Kononov, K. M. (Chelyabinsk)

81

ORG: none

B+1

TITLE: Strength of centripetal gas turbine during multiple starts

SOURCE: Vsesoyuznoye soveshchaniye po voprosam staticheskoy i dinamicheskoy prochnosti materialov i konstruktsionnykh elementov pri vysokikh i nizkikh temperaturakh, 3d. Termoprochnost' materialov i konstruktsionnykh elementov (Thermal strength of materials and construction elements); materialy soveshchaniya. Kiev, Naukova dumka, 1965, 317-323

TOPIC TAGS: turbine rotor, thermal fatigue, thermal stress, austenitic steel, gas turbine

ABSTRACT: The turbocompressor rotor cracks (turbocompressor TKR-11) formed after 2000-2500 hours of operation and the temperature profiles of the rotor during starting and stopping were investigated on stationary and rotating rotors. The temperature profiles were measured by thermocouples with the rotor material (EI572 alloy steel) serving as one junction. The combustion products in chamber VK-1 were used to measure the rotor temperature profiles at 773, 873, and 973K (gas temperature) with a stationary rotor and at gas flow equivalent to that giving

18

2

Card 1/2



L 24460-66

ACC NR:

AT6008677

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2620, 3660, and 4700 rad/sec rotor speed. Since equilibrium temperatures were reached after 2 minutes, the heating cycle consisted of a 3-minute start-up followed by 6 minutes cooling by air flow. It was found that operation at 2620 and 4700 rad/sec did not change the temperature profile as compared with the stationary case, so the latter is adequate for test purposes. It was also found that, during starting, temperature differences of up to 200C, and during cooling up to 400C, developed along the rotor blades ( $\approx 40$  mm long). Sample temperature profiles are presented. Orig. art. has: 4 figures.

SUB CODE: 21/ SUBM DATE: 19Aug65

Card 2/2 dda

ACC NR: AP6028153

SOURCE CODE: UR/0307/66/000/002/0073/0082

AUTHOR: Kononov, K. Ye.

ORG: none

TITLE: Ecological conditions on the flood-plain meadows of the Lena River Valley in southwestern Yakutia (water regime of the flood-plain soils)

SOURCE: Leningrad. Universitet. Vestnik. Seriya geologii i geografii, no. 2, 1966, 73-82

TOPIC TAGS: hydrographic survey, hydrometeorology, soil mechanics, flood plain, *SOIL CHEMISTRY, SOIL PROPERTY / LENA RIVER VALLEY*

ABSTRACT: This article describes the water regime of flood-plain soils of the Lena River in southwestern Yakutia. One of the negative characteristics of the Yukutian climate is the lack of moisture. During three growing seasons, water-regime studies were made of a) flood-plain, carbonate, average loam soils, b) flood-plain carbonate, stratified slime-loam soils, and c) flood-plain, steppe-meadow coarse, stratified sand-silt-loam soils. These studies indicate that although the water relationship in these soils differs greatly; many common features are found, i.e., dependence of the water regime on the mechanical composition of soils, moisture saturation of the upper boundary of permafrost, etc. The dynamics of soil moisture as shown as a chronoisoplithe, and physical water constants are given in tables based on the data obtained. Orig. art. has: 2 tables and 1 figure.

SUB CODE: 08 / SUBM DATE: 25JUN65/ ORIG REF: 015

Card 1/1

KONONOV, K.Ye.

Chemical method for controlling willow growths. Zemledelie 25  
no.10:71 0 '63. (MIRA 16:11)

FEDOROV, Vasilii Fedorovich; SIZYKH, V.A., ~~retsensent~~; KOMONOV, M.F.,  
retsensent; ARISTOV, Yu.K., red.; SKOBILING, L.F., red. izd-  
va; RIDNAYA, I.V., ~~tekhn.~~ red.

[Organization and technology of ship repairs] Organizatsiia i  
tekhnologiia sudoremonta. Moskva, Izd-vo "Rechnoi transport,"  
1963. 263 p. (MIRA 16:5)  
(Ships--Maintenance and repair)

TRCFIMOV, Vladimir Petrovich; KONONOV, K.G., inzh., retsenzen

[Manless coal mining] Bezliudnaia vyemka uglia. Kiev,  
Gostekhnizdat USSR, 1962. 254 p. (MIRA 17:6)

GOKHME'L'D, D.A., kand.tekhn.nauk, dotsent; KONONOV, K.M., aspirant

Adaptability of unevenly heated rotating disks. Izv.vys.ucheb.zav.;  
mashinostr. no.4:85-91 '62. (MIRA 15:7)

1. Chelyabinskiy politekhnicheskii institut.  
(Disks, Rotating)

ISKRA, Yevgeniy Vasil'yevich; KUTSEVALOVA, Yelizaveta Pavlovna;  
FAVOROV, Boris Pavlovich; MOSKALEV, A.T., inzh.,  
retsenzent; GRACHEV, N.D., inzh., retsenzent; KONONOV,  
M.D., inzh., retsenzent; ASHONEVITS, G.Yu., nauchn. red. ;  
NIKITINA, M.I., red.

[Painting operations in shipbuilding] Maliarnye raboty v  
sudostroenii. Leningrad, Sudostroenie, 1965. 237 p.  
(MIRA 18:5)

GUROV, Ivan Nikolayevich; KONONOV, Mikhail Ippolitovich; NAZAROV, G.I.,  
doktor tekhn.nauk, retsenzent; PETRUSOV, A.I., doktor tekhn.nauk,  
retsenzent; GALKIN, Yu.M., red.; FAL'KO, O.S., red.isd-va;  
SOKOLOVA, T.F., tekhn.red.

[Electric equipment of agricultural machinery] Elektrooborudo-  
vanie sel'skokhoziaistvennykh mashin. Pod obshchei red. IU.M.  
Galkina. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry.  
1960. 248 p. (MIRA 14:3)

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo  
khosyaystva (for Nazarov). 2. Khar'kovskiy politekhnicheskii  
institut (for Petrusov).  
(Agricultural machinery--Electric equipment)



KONONOV, M.I.

A useful beginning. Veterinariia 42 no.10:114 0 '65.

(MIRA 18:10)

1. Direktor Kirovogradskoy oblastnoy veterinarnoy polikliniki.

KNYAZEV, V.P.; KRASHENNIKOV, Ye.A.; KURNUSHKO, O.V.; KONONOV, M.I.;  
KOZ'LOV, V.S.

Automatic unit for studying variations in the weight of specimens.  
Zav. lab. 30 no.9:1150 '64. (MIRA 18:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii imeni Bardina.

*ABRAMOV, V.A.; KOZLOV, M.N.*

ABRAMOV, V.A.; KOZLOV, M.N.

Using heat-insulated risers in casting steel parts. Proizv.-tekh.  
inform.no.4:71-73 '51. (MLSA 10:3)  
(Steel castings)

USSR/Metals - Foundry, Methods

Aug 51

"Application of Thermally Insulated Risers With Self-Regulating Gas Pressure," V. A. Abramov, M. N. Kononov, Engineers, P. M. Sharoyko, Leningrad Accessories Plant imeni Lipse

"Litey Proiz" No 8, pp 27, 28

Method for creating pressure infeeding risers consists of using special pellets, made of core mixt, in depression of which a gas-forming charge is placed. For retardation of metal solidification, the Plant imeni Lipse uses risers surrounded by bushings made of materials with decreased thermal cond. Measures have purpose of metal conservation by decreasing size of risers. Satisfactory results were obtained from expts with castings made of steel, cast iron and nonferrous alloys.

PA 197T81

KONONOV, M.N.

Using oxygen blowing in smelting acid-resistant steels in electric  
arc furnaces, Proisv.-tekhn. inform. no.2:51-71 '52. (MIRA 10:6)

1. Glavnyy metallurg zavoda im. Lapse.  
(Steel--Metallurgy)

KONONOV, M. N.

"Improvements in Casting Fittings at the Plant imeni Lapse," p. 160.  
in book Mechanization and Automatic Control of Founding Processes, Leningrad,  
1957, 224pp.

S/128/60/000/005/003/004  
A104/A133

AUTHORS: Kononov, M. N., and Smol'yaninova, L. S.

TITLE: Epoxy resin patterns

PERIODICAL: Liteynoye proizvodstvo, no. 5, 1960, 37-38

TEXT: The article deals with epoxy resin patterns used at the Leningradskiy zavod im. Lepse (Leningrad Plant im. Lepse). The patterns have a smooth finish, requiring no mechanical working, and molding sand does not stick to the pattern surface. The accuracy and surface finish of castings is equal to that of castings made from metal patterns. Epoxy resin patterns are formed on wooden or metal master patterns. Wooden master patterns are used for ГОСТ 1855-55 and ГОСТ 2009-55 (GOST 1955-55 and GOST 2009-55) patterns for castings of simple configuration, while metal patterns are employed for casting of 2nd class tolerances. The manufacturing technology of sand molds, consisting of a metal molding plate (1), wooden molding box (2), master model (3), coating layer (4) and basic sand mixture (5) is shown in Figure 1. Wooden patterns are coated with epoxy glue of the following composition: 39 weight parts ЭА-6, БТМ 646-55 (ED-6, VTU M 646-55) epoxy resin; 8 parts

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S/128/60/000/005/003/004  
A104/A133

## Epoxy resin patterns

by weight dibutylphthalate ГOCT 3863-47 (GOST 3863-47); 3 parts by weight polyethylene polyamine BTY П-10-57 (VTU P-10-57) or tailings of hexamethylene diamine BTY No. 13x-23-28 (VTU No. 13kh-23-28) and 50 parts by weight acetone. The sand mold consists of a 2 - 4 mm coating layer and the basic sand mixture. The coating layer is composed of 52 weight parts ЭД-6, BTY 646-55 (ED-6, VTU 646-55) epoxy resin; 8 parts dibutylphthalate ГOCT 3863-47 (GOST 3863-47); 5 parts BTY П-10-57 (VTU P-10-57) polyethylene polyamine or 10 parts tailings of hexamethylene diamine BTY No. 13x-23-28 (VTU No. 13kh-23-28) and 30 parts marshalite. Plastics molds are shown in Figure 2 where dibutylphthalate is used as plasticizer. Two epoxy resin pattern mixtures are recommended. The first consists of 31.0 parts by weight ЭД-6 BTY M 646-55 (ED-6 VTU M 646-55) epoxy resin, 3.1 parts by weight ГOCT 3863-47 (GOST 3863-47) dibutylphthalate, 3.1 parts by weight BTY П-10-57 (VTU P-10-57) polyethylene polyamine and 62.8 parts by weight ACM TY 3648-53 (ASM TU 3648-53) powdered iron. The second mixture consists of 30.3 parts by weight ЭД-6 BTY M 646-55 (ED-6 VTU M 646-55) epoxy resin, 3.3 parts by weight ГOCT 3863-47 (GOST 3863-47) dibutylphthalate, 6.6 parts by weight BTY No. 1323-58 (VTU No. 1323-58) hexamethylene diamine tailings and 59.8 parts by weight ACM TY

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S/128/60/000/012/007/014  
A054/A030

AUTHOR: Kononov, M.N.

TITLE: Integrated Mechanization and Automation in a Malleable Cast Iron Foundry

PERIODICAL: Liteynoye proizvodstvo, 1960, No. 12, pp. 23 - 27

TEXT: In the Malleable Cast Iron Factory imeni Lense the following measures are being taken to mechanize and to automate production. In the forming materials store pneumatic and hydraulic transport will be introduced. The "115" type runners will be provided with automatic feeders for green and black sand. In the core-shop "305" type sand slingers in addition to the "286" type, moreover suspended, closed-circuit suspended and belt conveyors will be installed. In the charge materials store and the foundry shop the materials will be automatically weighed and their feeding into the furnace will be mechanized; the water-cooling of the melting of the furnace jacket and slag granulation will also be mechanized. In the cleaning shop, a continuous line comprising among other things tumbling and shot barrels and in the molding shop a highly mechanized production line will be installed with "254", "265" and "271" type machines, a semi-automatic produc-

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S/128/60/000/012/007/014  
A054/A030

# Integrated Mechanization and Automation in a Malleable Cast Iron Foundry

tion line comprising four pairs of "91271" type semi-automatic machines for 400 x 500 x 150 mm molding boxes with an actual output of 400 boxes per hour, an automatic molding line with two 4-position "94265" type automatic molding machines (180 half molds of 750 x 640 x 225 mm per hour) with a 20-sec operation cycle. The principal unit of mold forming is a 4-position automatic machine (Fig. 1). In its first position the mold is blasted and sprinkled, the molding box charged and filled with sand; in the second position sand is rammed into the molding box, in the third position the mold is roughly pressed and in the fourth position stripping takes place, after which the half mold is delivered onto the conveyor. The machine-table turns automatically. The pressing device, conveyor and roll-over mechanism are driven hydraulically, the other mechanisms pneumatically, by an electro-magnetic system. The ramming unit consists of a lifting table and a ramming mechanism. The piston of the lifting table is 700 mm in diameter, that of the ramming table 250 mm. The pressing mechanism is a hydraulic cylinder, the rod of which is fixed to the stand and has a pressing power of 55 tons. The stripping unit consists of a cylinder and a lifting table with piston. The discharge unit consists of a tilting table roller and conveyor. The output of the automatic line is 180 forms per hour, for 750 x 640 x 225 mm molding boxes.

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APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824320002-0

S/128/60/000/012/007/014  
A054/A030

# Integrated Mechanization and Automation in a Malleable Cast Iron Foundry

The average gross weight of the castings is 22 kg, the weight for the molding box 150 kg, that of the assembled form 600 kg. The following processes of this equipment are automated (Fig. 2): feeding and discharging of weights, shaking out of molding boxes, feeding the used molding boxes on traveling conveyor No. 1 and the empty ones on the automatic molding machine; the forming of the bottom and the top of the form, their feeding onto the roll-over mechanism, rolling-over and feeding onto the traveling conveyor No. 2, assembly of forms and their feeding onto the casting conveyor. Feeding of cores onto the conveyor No. 2 and pouring is done manually (Fig. 2). Each automatic molding machine operates independently with an output of 900 forms per hour. The machines can work simultaneously and separately. The removal of a form from one working place takes 40 sec. The various phases of the entire automatic process are synchronized and timed to 20 and 40 sec, respectively. The automatic line is controlled by a pneumatic system with the aid of pneumatic limit safety valves, which has been developed in the Moscow Motor Car Factory imeni Likhachov. The automatic line will require 7 workers instead of 16.5, at present required for this foundry, which means an increase in productivity of 240%. There are 10 figures.

Card 3/11

KONONOV, M. IV.

PHASE I BOOK EXPLOITATION

SOV/5648

Sokolov, Aleksey Nikolayevich, ed.

Mekhanizatsiya i peredovaya tekhnologiya liteynogo proizvodstva  
(Mechanization and Advanced Processing in Foundries) [Leningrad]  
Lenizdat, 1961. 236 p. 2,000 copies printed.

Ed.: Ye. V. Yemel'yanova; Tech. Ed.: I. M. Tikhonova.

**PURPOSE:** This collection of articles is intended for technical personnel, foremen, and skilled workmen of foundries. It may also be of use to staff members engaged in the mechanization of production operations.

**COVERAGE:** The collection contains articles discussing the experience of a number of Leningrad plants and engineering and design organizations in mechanizing foundry processes and in applying advanced techniques to the manufacture of castings. No personalities are mentioned. Some

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Mechanization and Advanced (Cont.)

SOV/5648

articles are accompanied by references. References are all Soviet.

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Sverdlov, V. I. Mechanization and Automation of Foundry Processes

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Zeleranskiy, Ya. V., M. S. Kashanskiy, and L. Z. Tsyganko.  
Pneumatic Transfer at Foundries

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Zelichenko, G. S. Automatic Line for Molding and Shakeout

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Zelichenko, G. S. Mechanization of the Cast-Iron Foundry  
at the "Elektrik" Plant

63

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Mechanization and Advanced (Cont.)

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Mechanization and Advanced (Cont.)

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Mednikov, Z. G. Application of the Group-Processing  
Method in Making Blanks by the Die Casting and Die  
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160

Desnitskiy, V. P. (deceased). Heat-Resistant Steel  
Castings in Power-Plant Constructions

172

Kremer, M. A. Determination of Sizes and Economic  
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El'tsufin, S. A. Cast Rotor Blades for Gas-Turbine  
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Tkachev, K. I. Experience in Developing and Using  
the Slot-Type Gating System

219

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Mechanization and Advanced (Cont.)

SOV/5648

Kononov, M. N. Patterns With an Epoxy-Resin Base

229

AVAILABLE: Library of Congress (TS233. S55)

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VK/wrc/bc  
11-15-61

IVANOV, I.; MATROSOVA, K.; KONONOV, N.

State Bank business and people. Den.1 kred. 19 no.5:49-55 My  
'61. (MIRA 14:5)

1. Zamestitel' upravlyayushchego Rostovskoy kontoroy Gosudarstvennogo  
banka (for Ivanov, Matrosova). 2. Glavnyy bukhgalter Vinnitskoy  
oblastnoy kontory Gosudarstvennogo banka (for Kononov).  
(Rostov Province--Banks and banking)  
(Vinnitsa Province--Banks and banking)



BELYSHEV, P.V.; USOV, G.V.; SOLOV'YEV, M.K. [deceased]; LEBEDEV, N.D.;  
LEVIN, V.F.; PEVZNER, M.L.; USOV, A.M.; ZOLKIN, I.D.; KOMONOV,  
N.A.; IVANOV, P.P., red.; PANKRATOV, A.I., tekhn. red.

[Economics of a textile enterprise; for the aid of studying applied  
economics] Ekonomika tekstil'nogo predpriatiia; v pomoshch' izu-  
chaiushchim konkretnuiu ekonomiku. Ivanovo, Ivanovskoe knizhnoe izd-  
vo, 1960. 359 p. (MIRA 14:7)

(Textile industry)

MOROZOV, Stanislav Ivanovich; PAVLOV, Fridrikh Alekseyevich; KONONOV,  
N.A., red.; MYAKUSHKO, V.P., red. izd-va; GRECHISHCHEVA, V.I.,  
tekhn. red.

[Modern methods of building winter logging roads]Sovremennye  
metody stroitel'stva zimnikh lesovoznykh dorog. Moskva,  
Goslesbumizdat, 1962. 88 p. (MIRA 16:3)  
(Forest roads)

PARFENOV, Gennadiy Makarovich; KONONOV, N.A., red.; KIMMEL', L.S.,  
red.izd-va; PARAKHINA, N.L., tekhn. red.

[Hauling lumber with trucks and motor vehicles without skid-  
ding] Bestrelevochnaia vyvozka lesa traktorami i avtomashi-  
nami. Moskva, Goslesbumizdat, 1961. 89 p. (MIRA 16:3)  
(Lumber--Transportation)

KONONOV, N.A.; SEMENOVA, A.A.; GRUND, F.F.

Regeneration of spent acids and neutralization of acid in a  
naphthalene plant. Koks i khim. no.9:51 '63. (MIRA 16:9)

1. Kemerovskiy koksokhimicheskiy zavod.  
(Naphthalene) (Acids, Inorganic)

The depolymerization of dicyclopentadiene by a con-  
tinuous method N. P. Konovalov, V. I. Lashin, V. I.  
S. S. Novikov, H. A. Konovalov, V. I. Lashin, V. I.  
1953, 101-2 (Engl translation) See 48 1953

KONONOV, N. F.

3

The depolymerization of dicyclopentadiene by a continuous method. N. F. Kononov, Z. Ya. Lashina, and S. S. Novikov, *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1953, 112-13.—The continuous depolymerization of dicyclopentadiene to pure monomer was effected by feeding the dimer from a dropping funnel into a heated column packed with pieces of glass tubing 5 mm. in diam. and 5 mm. long. The column consisted of a 700 mm. length of 30 mm. tubing. The lower 500 mm. was electrically heated and the dimer was fed in at the top of this portion. The upper portion acted as a fractionating column to return any dimer entrained in the monomer vapor. The exit at the upper end of the column led to a water-cooled condenser and thence to an ice-cooled receiver. The lower end of the column led to a flask heated to decomp. any dimer getting by the column. The capacity of the app. was 150 g./l. of reaction vol. After about 100-150 hrs. of continuous operation it was necessary to stop and clean out the high polymer tars that had collected. A sample run with the column at 195-200° lasting 12 hrs. converted 582.6 g. of dimer to 575.6 g. of monomer. The dimer had the following characteristics: b.p. 58-60° at 14 mm.;  $n_D^{20}$  = 1.5125;  $d_4^{20}$  = 0.9772. The monomer characteristics were: b.p. 40-42°;  $n_D^{20}$  = 1.4448;  $d_4^{20}$  = 0.8010.

Joseph B. Levy

SHOSTAKOVSKIY, M.F., professor; KOMONOV, N.F.

Acetic acid manufacture. Khim.v shkole 9 no.6:15-23 H-D '54.  
(Acetic acid) (MLBA 8:1)

*Kandrov, N. F.*

4 Metal oxide catalysts for partial oxidation of  
forming the gasoline fraction (C<sub>4</sub>-C<sub>10</sub>)  
over a platinum catalyst.  
1. Shukla M. A. (1978)  
2. Ziniskii I. M.  
3. ...  
4. ...  
by hydrogenation of ...  
gasoline fraction ...  
pressure ...  
The catalyst with ...  
don't ...  
don't ...

10  
4E<sup>4</sup>  
4E<sup>2</sup>  
4E<sup>3</sup>



AUTHORS:

*KONONOV, N. F.*  
Minachev, Kh.M., Shuykin, N.I., Kononov, N.F.,  
Garanin, I.L., Ryashentseva, M.A.

62-12-7/20

TITLE:

The Investigation of Oxide-Metallic Catalysts of Gasoline Reforming (Issledovaniye oksidno-metallicheskih katalizatorov reforminga benzinov). Information 2. The Reforming of Narrow Gasoline Fractions of the Ilsk Mineral Oil and of the Mineral Oil of the Second Baku by Means of Platinum Catalysts (Soobshcheniye 2. Reformirovaniye uskikh benzinovykh fraktsiy il'skikh neftey i neftey Vtorogo Baku na platinovykh katalizatorakh).

PERIODICAL:

Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1957, Nr 12, pp. 1472-1477 (USSR)

ABSTRACT:

Recently, the problem of producing active and stable gasolines (with a view of obtaining aromatic hydrocarbons) has been attaining special importance. In previous works (4,5) it was shown that the catalyst 0.5% Pt -  $Al_2O_3$  has a favorable dehydrating and (with respect to isomers) efficacious activity. In the present paper the authors investigated the activity and stability of the catalyst 0.5% Pt -  $Al_2O_3$  under the conditions of the reformation of the fraction (boiling point 95-115°) of the mineral oil of Ilsk. It was proved that, specially selected conditions prevailing, the catalyst

Card 1/2

The Investigation of Oxide-Metallic Catalysts of Gasoline Reforming. Information 2. The Reforming of Narrow Gasoline Fractions of the Ilsk Mineral Oil and of the Mineral Oil of the Second Baku by Means of Platinum Catalysts

62-12-7/20

retained its stability in the case of a sufficiently high activity (of up to 2000 hours). Furthermore, a comparative investigation was carried out concerning the properties of the two platinum catalysts at the conditions of the reformation of the fraction (85-138°) of the mineral oil of the second Baku (Vtoroy Baku). In this connection it was found that the catalyst 0.5% - Pt-Al<sub>2</sub>O<sub>3</sub> is much more advantageous than the catalyst 0.5% Pt-SiO<sub>2</sub>. The advantage it offers consists in the greater yield of aromatic hydrocarbons as well as in a lower degree of gas formation. It was shown that the catalyst 0.5% Pt-Al<sub>2</sub>O<sub>3</sub> is very well suited for reforming gasoline fractions (for the purpose of obtaining aromatic hydrocarbons). Besides, its hydrocracking properties are rather insignificant. There are 2 tables, and 10 references, 7 of which are Slavic.

ASSOCIATION: Institute for Organic Chemistry AN USSR imeni N.D.Zelinskiy  
(Institut organicheskoy khimii im.N.D.Zelinskogo Akademii Nauk SSSR).

SUBMITTED: June 29, 1956

AVAILABLE: Library of Congress

Card 2/2

1. Gasolene-Oxide-Metallic-Catalyzers 2. Mineral oil-Gasolene fractions-Platinum catalysts

KONONOV, N. F.

**AUTHORS:** Minachev, KH. M.; and Kononov, N. F. (Moscow)

**TITLE:** Catalytic Conversions of Individual Hydrocarbons and Their Natural Mixtures (Gasolines and Ligoins) under the Pressure of Hydrogen (Kataliticheskiye prevrashcheniya individual'nykh uglevodorodov i ikh estestvennykh smesey / benzinov i ligoinov / pod davleniyem vodoroda)

**PERIODICAL:** Uspekhi Khimii, 1957, Vol. 26, No. 2, pp. 176-211 (U. S. S. R.)

**ABSTRACT:** By means of tables, graphs, and extensive textual discussion, the author surveys the status of catalytic reforming of benzines and ligoins from petroleum of varying origin, permitting the output (in addition to fuel) of a considerable number of aromatic hydrocarbons: benzene, toluene, ethylbenzene, and xylenes. Development of petroleum processes in the U.S.A., Canada, Australia is described, wherein mention is made that about 60 installations are operating in the U.S.A. for catalytic reforming (a process which is second in importance only to catalytic cracking) with a total output of benzene and concentrates of aromatic hydrocarbons amounting to 95,000 cubic meters per day. For the U.S.S.R., the petroleum yield by 1960

Card 1/12

Catalytic Conversions of Individual Hydrocarbons and Their Natural Mixtures (Gasolines and Ligoins) under the Pressure of Hydrogen  
 APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824320002

should reach 135 million tons and the output of light oil products will be twice that of 1955. The antiknock qualities of Soviet automobile gasolines have been raised to 66 units only since the end of 1955. Reactions occurring during catalytic reforming are described.

The author's thesis is to explain the state of the problem of the catalytic conversions of hydrocarbons (C<sub>5</sub> and higher) and their natural mixtures under the pressure of hydrogen on the basis of studies published in the last several years. The author's study is based mostly on British and American sources. The general topics under which this thesis is developed are underlined and explained below.

Conversions of Individual Hydrocarbons over Oxide-metallic and Oxide Catalysts with an Increased Pressure of Hydrogen in the Flowing System. Seven U. S. patents on this subject are cited and described.

Card 2/12

*Kononov, N.F.*

62-58-4-7/32

**AUTHORS:** Minachev, Kh. M., Shuykin, N. I., Ryashentseva, M. A.,  
Kononov, N. F., Kurdyumova, I. N.

**TITLE:** Investigation of the Properties of Metal-oxide Catalysts  
for Gasoline Reforming (Issledovaniye svoystv okisno-  
metallicheskikh katalizatorov reforminga benzina). Commu-  
nication 3: Conversions of the Gasoline Fraction at the  
Boiling Point 89,5-126° of the Second Baku Petroleum on  
Palladium Catalyst (Soobshcheniye 3. Prevrashcheniya  
fraktsii s t. k.p. 89,5 -126° benzina neftey vtorogo Baku na  
palladiyevom katalizatore)

**PERIODICAL:** Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk,  
1958, Nr 4, pp. 423 - 436 (USSR)

**ABSTRACT:** The previous papers (References 1,2) contained the data  
found in the investigation of the gasoline fractions of  
some petroleum types. The influence of the chemical properties  
of the carrier on the activity of the catalyst was already  
described in earlier works. This paper gives the experimental  
material of the authors. In the presence of 2 different samples

Card 1/3

62-58-4-7/32

Investigation of the Properties of Metal-oxide Catalysts for Gasoline Reforming. Communication 3: Conversions of the Gasoline Fraction at the Boiling Point 89,5 - 126° of the Second Baku Petroleum on Palladium Catalyst

of a palladium catalyst 0,5% Pd - Al<sub>2</sub>O<sub>3</sub> which are different by their working methods the reforming of the fraction (boiling point 85,5 - 126°) was carried out at 470 - 490° C at 20 atmospheres excess pressure. The experiment showed that both samples of the catalyst carry out the dehydrogenation of 6-membered cyclanes as well as the conversion of 5-membered cyclanes into 6-membered ones (with their subsequent dehydrogenation). In the presence of the second experimental catalyst numerous 5-membered cyclanes and paraffines joined the process of formation of aromatic hydrocarbons. This process is still more intensive in the presence of catalyst n.2 than in that of n.1. Moreover the catalizate n.2 distinguishes itself by the richer content of ramified paraffines.

Card 2/3

62-58-4-7/32

Investigation of the Properties of Metal-oxide Catalysts for Gasoline Reforming. Communication 3: Conversions of the Gasoline Fraction at the Boiling Point 89,5 - 126° of the Second Baku Petroleum on Palladium Catalyst

Furthermore the composition of the initial fraction and of two catalysts were determined by means of a combined method. There are 1 figure, 7 tables, and 20 references, 13 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute for Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: November 3, 1956

AVAILABLE: Library of Congress

1. Petroleum-Gasoline fractions—Analysis 2. Metal oxide catalysts—Properties

Card 3/3

AUTHORS: Minachev, Kh. M., Shuykin, N. I., SOV/62-58-6-11/37  
Ryashentseva, M. A., Kononov, N. F.

TITLE: Investigation of the Properties of Metal-Oxide Catalysts  
of Gasoline Re-Forming (Issledovaniye svoystv okisno-  
metallicheskikh katalizatorov reforminga benzinov)  
Communication 4. Re-Forming the Fraction With Boiling Point  
89,5-126° of the Benzine of the Mineral Oils of the Volga-  
Ural Group on a Palladium Catalyst treated with hydrogen  
sulfide (Soobshcheniye 4. Reformirovaniye fraktsii s t. kip.  
89,5-126° benzina neftey volzhsko-ural'skoy gruppy na  
palladiyevom katalizatore, obrabotannom serovodorodom)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk,  
1958, Nr 6, pp. 719-725 (USSR)

ABSTRACT: The problem to be solved by this paper was the investigation  
of the activity and stability of a sulfurous palladium  
catalyst under the conditions of the re-formation of the  
fraction (boiling point 89,5 - 126°) of benzine obtained  
from the mineral oils of the Volga-Ural group. Under given  
conditions the catalyst carries out the dehydrogenation of

Card 1/3

Investigation of the Properties of Metal-Oxide ' SOV/62-58-6-11/37  
Catalysts of Gasoline Re-Forming. Communication 4.  
Re-Forming the Fraction With Boiling Point 89,5 - 126° of the Benzine of  
the Mineral Oils of the Volga-Ural Group on a Palladium Catalyst  
treated with hydrogen sulfide

6-membered cyclanes and, besides, also the dehydroisomerization  
of 5-membered cyclanes; the skeleton isomerization of alkanes,  
and the de-sulfurization of benzine. A catalyst consisting of  
0,5% Pd on Al<sub>2</sub>O<sub>3</sub>, which had previously been treated with  
hydrogen sulfide, showed more resistivity against the effect  
of organic sulfurous compounds than palladium catalysts that  
had not yet been subjected to the action of hydrogen sulfide.  
The individual composition of the initial fraction was  
investigated. There are 1 figure, 6 tables, and 8 references,  
5 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii  
nauk SSSR (Institute of Organic Chemistry imeni N. D.  
Zelinskiy, AS USSR)

SUBMITTED: December 13, 1956  
Card 2/3



Investigation of the Properties of Metal-Oxide  
Catalysts of Gasoline Re-Forming. Communication  
4. Re-Forming the Fraction With Boiling Point 89,5-  
126° of the Benzine of the Mineral Oils of the  
Volga-Ural Group on a Palladium Catalyst treated  
with hydrogen sulfide

SOV/62-58-6-11/37

- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 1. Metal oxides--Catalytic properties | 2. Palladium catalysts--Performance |
| 3. Hydrogen sulfide--Chemical effects | 4. Benzenes--Synthesis              |
| --Fractionation                       | 5. Mineral oils                     |

Card 3/3

SHUYKIN, N.I.; MINACHEV, Kh.M.; NOVIKOV, S.S.; KONONOV, N.F.; GARANIN, I.L.

Reforming straight-run gasolines by low-temperature dehydrogenation  
on platinized charcoal. Zhur.prikl.khim. 31 no.11:1732-1738 N '58.  
(MIRA 12:2)

(Gasoline)

SHUYKIN, N.I.; MINACHEV, Kh.M.; GARANIN, I.L.; NOVIKOV, S.S.; KONONOV, N.F.

Production of toluene concentrates from petroleum fractions by low-  
temperature dehydrogenation on platinated charcoal. Zhur.prikl.khim.  
31 no.11:1765-1767 N '58. (MIRA 12:2)

(Toluene)

(Petroleum products)

(Dehydrogenation)

5(3)

SOV/79-29-7-27/83

AUTHORS: Shuykin, N. I., Kononov, N. F., Kashkovskaya, L. K.

TITLE: Catalytic Hydrodealkylation of Polyalkyl Benzenes  
(Kataliticheskoye gidrodealkilirovaniye polialkilbenzolov).  
I. Demethylation of Toluene Over 10%-Ni-Al<sub>2</sub>O<sub>3</sub>. The Effect of  
Hydrogen Pressure (I. Demetilirovaniye toluola na 10% Ni-Al<sub>2</sub>O<sub>3</sub>.  
Vliyaniye davleniya vodoroda)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2230-2235 (USSR)

ABSTRACT: Toluene, which, compared to the important benzene, was industrially only little utilized, has frequently been investigated (Refs 1-12) for the purpose of converting it into benzene by catalytic methods. Neither in the papers mentioned nor in patents attention was paid to the stability of the catalysts since in most cases the maximum duration of the experiments was 3 hours. The present paper dealt with the investigation of the selective conversion of toluene into benzene over an active and sufficiently stable catalyst. In this case the hydrogenation reactions of the benzene nucleus, the regrouping of the methyl groups, the hydrocracking process,

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Catalytic Hydrodealkylation of Polyalkyl Benzenes. SOV/79-29-7-27/83  
I. Demethylation of Toluene Over 10%-Ni-Al<sub>2</sub>O<sub>3</sub>. The Effect of Hydrogen Pressure

and the thermal decomposition under the formation of coke should take place only to a small degree. As is known, an extensive cleavage of toluene takes place at normal hydrogen pressure and approximately 450° with an impurification of the platinum-, nickel-, and other catalysts by coke; at increased pressure, on the other hand, the undesired hydrogenation of the benzene nucleus takes place. Therefore, the influence of hydrogen pressure on the demethylation of toluene had to be investigated in the first place. The experiments and the apparatus used are described in the experimental part. The demethylation of toluene into benzene took place at a pressure of 5 at without formation of hydroaromatic hydrocarbons, without a regrouping of the methyl groups, and without hydrocracking of benzene to methane. The yield in the catalyzate (with a benzene content of 30% approximately) is approximately 85% , computed for toluene. At a considerably higher hydrogen pressure (25 atmospheres excess pressure) and under otherwise equal conditions considerable amounts of hydroaromatic hydrocarbons are formed (cyclo- and methyl cyclohexane).

Card 2/3

Catalytic Hydrodealkylation of Polyalkyl Benzenes. SOV/79-29-7-27/83  
I. Demethylation of Toluene Over 10% Ni-Al<sub>2</sub>O<sub>3</sub>. The Effect of Hydrogen Pressure

In this case also toluene was subjected to a hydrocracking process. There are 2 figures, 2 tables, and 14 references, 9 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: June 14, 1958

Card 3/3

5.3300,5.1190

77864

SOV/79-30-2-15/78

AUTHORS: Shuykin, N. I., Kashkovskaya, L. K., Kononov, N. F.

TITLE: Catalytic Hydrodealkylation of Polyalkylbenzenes. II. Demethylation of Toluene over 10% Nickel-Alumina Catalyst. Effect of Temperature and of the Rate of Feed of Toluene

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 424-430 (USSR)

ABSTRACT: The authors studied the effect of temperature and feed rate of toluene upon the degree of hydrogenolysis of toluene over 10% nickel-alumina, in the temperature range 430-510°. It was found earlier (Zhur. Obshchey Khim., 29, 2230, (1959) that the following reactions can take place under conditions of hydrogenolysis (Ni-Al<sub>2</sub>O<sub>3</sub>, 460°, 5 atm):

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Catalytic Hydrodealkylation of Polyalkylbenzenes. II. Demethylation of Toluene over 10% Nickel-Alumina Catalyst. Effect of Temperature and of the Rate of Feed of Toluene

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SOV/79-30-2-15/78

$C_6H_5CH_3 + H_2 \rightarrow C_6H_6 + CH_4$   
 $C_6H_5CH_3 + H_2 \rightarrow C_6H_5CH_3 + H_2$   
 $C_6H_5CH_3 + H_2 \rightarrow C_6H_5CH_3 + H_2$   
 $C_6H_5CH_3 + H_2 \rightarrow C_6H_5CH_3 + H_2$

The experimental results show that in the temperature range 430-460°, reactions (2), (3), and (4) do not take place to any appreciable extent. (Hydrogenation was performed in apparatus which was described earlier (loc. cit.); the products of catalysis were fractionated and identified by their Raman spectra (optical analysis was performed by Yu. P. Yegorov); in all experiments the hydrogen:toluene ratio equaled 5). Increase of pressure speeds up reactions (3) and (4) (from 0.6 to 35% for toluene-methylcyclohexane conversion and from 1

Card 2/4



Catalytic Hydrodealkylation of Polyalkyl  
benzenes. II. Demethylation of Toluene  
over 10% Nickel-Alumina Catalyst. Effect  
of Temperature and of the Rate of Feed of  
Toluene

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SOV/79-30-2-15/78

to 49% for benzene-cyclohexane conversion with an increase in pressure from 5 to 25 atm], while raising the temperature above 460° increases destruction of the aromatic ring: reaction (2). It was found that a change of temperature from 430 to 510° does not essentially affect the yield of the catalysis products (85-90%), nor the content of benzene (30-35%). The "life" of the catalyst under conditions of steadily rising temperature is over 120 hours, which is longer than at constant temperature (at 460° it was found to be only 50 hours (loc.cit.)). Increase in the feed rate of toluene from 0.5 to 1 hr<sup>-1</sup> leads to a considerable (from 30-35 to 15-20%) decrease in benzene content in the products of catalysis (but on the other hand destruction, reaction (2), is inhibited by higher flow rate of toluene). There are 3 tables; and 8 references, 7 Soviet, 1 U.S. The U.S. reference is: Selected Values of Physical and Thermodynamic Properties of

Card 3/4

Catalytic Hydrodealkylation of Polyalkyl-  
benzenes. II. Demethylation of Toluene  
over 10% Nickel-Alumina Catalyst. Effect  
of Temperature and of the Rate of Feed of  
Toluene

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SOV/79-30 2-15/78

Hydrocarbons and Related Compounds, Pittsburgh,  
Pennsylvania (1953).

ASSOCIATION: Institute of Organic Chemistry of the Academy of  
Sciences, USSR (Institut organicheskoy khimii Akademii  
nauk SSSR)

SUBMITTED: February 17, 1959

Card 4/4

AKIMOV, V.M.; SLINKIN, A.A.; RUBINSHTEYN, A.M.; SHUYKIN, N.I.;  
KONONOV, N.F.; KASHKOVSKAYA, L.K.

Effect of spinel formation on the regenerative capacity of the  
Ni -  $\text{Al}_2\text{O}_3$  catalyst. Izv. AN SSSR. Otd.khim.nauk no.8:1516-  
1518 Ag 1961. (MIRA 14:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.  
(Spinel) (Catalysts)

SHUYKIN, N.I.; KONONOV, N.F.; KASHKOVSKAYA, L.K.; AKIMOV, V.M.

Catalytic hydrodealkylation of polyalkyl benzenes.

Part 3: Demethylation of toluene on nickel-alumina

catalysts. Effect of nickel concentration. Zhur.ob.khim.

32 no.11:3595-3599 N '62. (MIRA 15:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo  
AN SSSR.

(Toluene)

(Nickel catalysts)

(Methyl group)

AKIMOV, V.M.; SHUYKIN, N.I.; KASHKOVSKAYA, L.K.; KONONOV, N.F.

Phase transitions in the process of regeneration of the nickel-  
magnesium-aluminum oxide spinel catalyst. Izv. AN SSSR Ser.khim.  
no.10:1862-1863 O '63. (MIRA 173)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SHUYKIN, N.I.; KONONOV, N.F.; KASHKOVSKAYA, L.K.; AKIMOV, V.M.

Catalytic hydrodealkylation of polyalkyl benzenes. Part 4: Demethylation of toluene on catalysts of the Ni - MgO . Al<sub>2</sub>O<sub>3</sub> composition. Zhur.ob.khim. 33 no.12:3871-3875 D '63. (MIRA 17:3)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

PISARENKO, V.N.; POGORELOV, A.G.; NOVIKOVA, L.A.; IVANOVA, N.G.;  
KONONOV, N.F.

Use of multiple regression equations for the quantitative  
analysis of heterogeneous catalysis. Zav.lab. 30 no.3:336-337  
'64. (MIRA 17:4)

1. Institut organicheskoy khimii AN SSSR.

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONONOV, N.F.; ZARUTSKIY, V.V.;  
OSTROVSKIY, S.A.; ARAKELYAN, V.G.

Triethanolamine vinylation reaction. Izv, AN SSSR. Ser. khim. no.4:  
698-701 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.



BESPROZVANNYY, M.A.; KONONOV, N.F.; KHARLAMOV, V.V.

Formation of free radicals in the catalytic reduction of carbon tetrachloride. Izv. AN SSSR. Ser. khim. no.8:1345-1350 '65.  
(MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

GOLOVKIN, G.V.; PRYANISHNIKOVA, M.A.; KONONOV, N.F.; PLATE, A.F.; ZARUTSKIY, V.V.

Preparation of bicyclo[2,2,1]hepta-2,5-diene; effect of the nature of phlegmatizer, temperature, pressure, and cyclopentadiene feed rate. Izv. AN SSSR.Ser.khim. no.10:1850-1855 '65.

(MIRA 18:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

KONONOV, N.F.; MAKAROVSKIY, Ya.I.; ROZENGART, M.I.; KOGAN, V.B.

Chromatographic determination of the selectivity of separation  
agents. Zhur. prikl. khim. 38 no.11:2522-2528 N '65.

(MIRA 18:12)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.  
Submitted December 16, 1963.

KUNITSKIY, N.P., doktor tekhn.nauk; IVANOV, G.M., kand.tekhn.nauk; KOMONOV,  
N.G., inzh.

Transient processes in systems with reversible ionic electric  
drives. Elektrichestvo no.11:33-37 N '64.

(MIRA 18:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut Chernoy  
metallurgii imeni Bardina.

GOKHFEL'D, D.A., kand.tekhn.nauk; KONONOV, N.M., inzh.; SUKHOV, Z.I., inzh.

Studying the vibration of the working wheel blades of the turbine  
of the TKR-11 turbocompressor. Trakt. i sel'khoz mash. no.1:17-19  
Ja '65. (MIRA 18:3)

1. Chelyabinskiy politekhnicheskiy institut (for Kononov).
2. Chelyabinskiy traktorny zavod (for Sukhov).

KONONOV, N.M., starshiy prepodavatel'

Investigating the vibrations of rotor blades of a radial-flow  
centripetal turbine. Izv. vys. ucheb. zav.; mashinostr. no.2:  
131-139 '65. (MIRA 18:5)

KONONOV, N.P.

Ratio of the components of corn kernels as related to their size.  
Soob. i ref. VNIIZ no.4:30-31 '61. (MIRA 16:5)

1. Zaveduyushchiy Dolinskiy opytney laboratoriyey Vsesoyuznogo  
nauchno-issledovatel'skogo instituta zerna i produktov yego  
pererabotki.

(Corn (Maize)—Analysis and chemistry)

KONONOV, N. V.

Dissertation: "The Vegetation Cover of the Upper Kuban Basin." Cand Biol  
Sci, Kishinev State U, 23 Jun 54. ( Sovetskaya Moldaviya, Kishinev, 12 Jun 54)

SO: SUM 318, 23 Dec 1954



Антонов, О. К.

MEL'NIK, M.I.; NIKITINA, T.A., kandidat meditsinskikh nauk; BABASEVA,  
Ye.P.; FOKINA, A.I.; KOHONOV, O.K.; SEVERIN, A.V.

Treatment of mycoses of the scalp with Lesovykh solutions No.1  
and No.2 without using X rays. Vest. ven. i dermat. no.5:21-22  
S-O '54. (MIRA 7:11)

1. Iz Kiyevskogo dermato-venerologicheskogo instituta (dir. G.Ye.  
Koryakin) i Kiyevskogo gorodakogo dispansera (glavnyy vrach A.S.  
Ivanov)

(HEAD, diseases,  
fungus dis., chemother.)

(FUNGUS DISEASES,  
scalp, chemother.)

ACC NR: AR6035219 SOURCE CODE: UR/0274/66/000/008/B032/B032

AUTHOR: Kononov, O. V.; Krivetskiy, A. A.

TITLE: Assessing the accuracy of acoustic direction finders during operation with pulse interference

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 8B211

REF SOURCE: Inform. sb. Tsentr. n. -i. in-t morsk. flota, no. 31(141), 1965, 54-57

TOPIC TAGS: direction finder, signal interference, pulse interference

ABSTRACT: The dependence of the limit value of the coefficient  $K_{lim}$  was experimentally determined. It characterizes the minimum amplitude at which signals can be distinguished in interference, from repetition rate  $F$  and the amplitude of the pulse noise. The dependence on  $F$  can be approximated by a straight line with an incline of  $6 \text{ dB}$  for an octave. Using this dependence, it is possible to compute the maximum error by the acoustic direction finder under pulse interference conditions with a known  $F$ . Orig. art. has: 2 figures. Bibliography of 2 titles. [Translation of abstract] [NT]

Card 1/1 SUB CODE: 17/ UDC: 621.396.982.6

ACC NR: AR6035394

(N)

SOURCE CODE: UR/0398/66/000/009/V025/V025

AUTHOR: Kononov, O. V.; Krivetskiy, A. A.

TITLE: Estimate of the accuracy of radio direction finders with audio output when working under pulsed noise conditions

SOURCE: Ref. zh. Vodnyy transport, Abs. 9V178

REF. SOURCE: Inform. sb. Tsentr. n.-i. in-t morsk. flota, no. 31(141), 1965, 54-57

TOPIC TAGS: direction finder, accoustic noise, signal noise separation, navigation aid

ABSTRACT: The authors have determined experimentally the dependence of the limiting value of the coefficient  $K_{lim}$  characterizing the minimum signal amplitude that can be distinguished from noise, as a function of the repetition frequency  $F$  and the amplitude of the pulsed noise. The dependence on  $F$  can be approximated by straight line with 6 db/octave slope. Using this dependence, one can calculate the maximum error of an audio direction finder under conditions of pulsed noise with known value of  $F$ . 2 illustrations. Bibliography, 2 titles. [Translation of abstract]

SUB CODE: 17, 09

Card 1/1

UDC: 621.396.663.004

GINZBURG, A.I.; KONONOV, O.V.; BELYANKIN, D.S., akademik.

Cesium spodumene. Dokl.AN SSSR 91 no.5:1203-1206 Ag '53.

(MLRA 6:8)

1. Akademiya nauk SSSR (for Belyankin).
  2. Mineralogicheskiy muzey Akademii nauk SSSR (for Ginsburg and Kononov).
- (Cesium) (Spodumene)

Samples of spodumene similar to those reported by Quensel were analyzed. It is shown that diaspodumene or cesium-spodumene (the latter is given by Quensel as Contg.  $\text{Cs}_2\text{O}$  and its formula as  $\text{CsAl}(\text{SiO}_3)_2$ ) are nothing more than spodumene contg. some impurities. Spodumene is easily replaced by pollucite and the inclusions of  $\text{SiO}_2$  remain. Such a myrmekite is considered as the circumstance which misled Quensel who apparently had pollucite contaminated with material contg.  $\text{Cs}_2\text{O}$ .

KONONOV, O.V.

Behavior of tungsten and molybdenum during the formation of the  
Tyrny-Auz skarn deposit. Vest.Mosk.un.Ser.biol., pochv., geol.,  
geog. 13 no.3:123-132 ' 58. (MIRA 12:1)

1. Kafedra mineralogii Moskovskogo gos. universiteta.  
(Tyrny-Auz--Molybdenite) (Tyrny-Auz--Scheelite)

KONONOV, O.V.

Composition and some physical properties of scheelites in the  
Tyrnyauz deposit. Vest.Mosk.un.Ser.4: Geol. 15 no.2:47-53 M-  
Ap '60. (MIRA 14:4)

1. Kafedra mineralogii Moskovskogo universiteta.  
(Tyrnyauz Region—Scheelite)

KONONOV, P. A.

Kononov, P. A.

"Some Problems of the Regulation of a Piston Aircraft Engine Using Velocity and Pressure Regulators." Min Higher Education USSR. Leningrad Inst of Aviation Instrument Building. Leningrad, 1955 (Dissertation for the degree of Candidate in Technical Sciences)

SO: Knizhnaya letopis' No. 27, 2 July 1955

S/123/59/000/010/067/068  
A004/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 10, p. 375,  
# 40300

AUTHOR: Kononov, P. A.

TITLE: The <sup>23</sup>Piston-Type Aircraft Engine Being Controlled by the Number of  
Revolutions and Boosting Pressure

PERIODICAL: Tr. Leningr. in-ta aviats. priborostr., 1958, No. 19, pp. 84-93 ✓

TEXT: The author analyzes the effects of a change in magnitude of the  
main engine parameters (boosting and number of revolutions) on restoring the  
equilibrium for the control system.

Translator's note: This is the full translation of the original Russian  
abstract.

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S/123/59/000/010/066/068  
A004/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 10, pp. 374-375, # 40297

AUTHOR: Kononov, P. A.

TITLE: On the Control of Piston-Type Aircraft Engines With Controllable Pitch Propeller and Universal Boosting Pressure Regulator

PERIODICAL: Tr. Leningr. in-t aviats. priborostr., 1958, No. 19, pp. 94-111

TEXT: The author gives a description of the layout of a one-lever control of piston-type aircraft engines with controllable pitch propeller and presents calculations of the kinematics and dynamics of this control system. For the investigation of the control dynamics of piston engines with supercharger, boosting pressure regulator and controllable pitch propeller, the linear theory of automatic control yields practically suitable results for the main operation conditions of the engine. The universal boosting pressure regulator improves the control and counteracts the "throwing" of the engine revolutions.

Translator's note: This is the full translation of the original Russian abstract.  
Card 1/1

SHEVYAKOV, Aleksey Andreyevich; MASLENNIKOV, M.M., prof., doktor tekhn.  
nauk, retsenzent; ZLATOUSTOV, S.V., dotsent, retsenzent; KONONOV,  
~~P.A.~~, dotsent, retsenzent; YANOVSKIY, I.L., inzh., red.; MOROZOVA,  
P.B., izdat.red.; ROZHIN, V.P., tekhn.red.

[Automatic control of airplane power plants] Avtomatika aviatsion-  
nykh silovykh ustanovok. Moskva, Gos.izd-vo obr.promyshl., 1960.  
372 p. (MIRA 13:2)  
(Airplanes--Engines) (Automatic control)

KORONOV, P. F.

KORONOV, P. F.: "Changes in the functions of the kidneys and liver in Botkin's disease." Second Moscow State Medical Inst imeni I. V. Stalin. Yaroslavl', 1955. (Dissertation for the Degree of Candidate in Medical Sciences).

Source: Knizhnaya letopis' No 28 1956 • Moscow

VASILEVSKIY, M.E., prof.; KONONOV, P.F., dotsent

Disturbance of water metabolism in the active phase of rheumatic fever. Vrach.delo no.6:581-584 Ja '59. (MIRA 12:12)

1. Kafedra gospiatal'noy terapii (zav. - prof. M.E. Vasilevskiy) Yaroslavskogo meditsinskogo instituta.  
(RHEUMATIC FEVER) (WATER IN THE BODY)

KONONOV, P.F., dotsent

Ascitic forms of Botkin's disease. Kaz.med.zhur. 41 no.1:30-33  
Ja-F '60. (MIRA 13:6)

1. Iz kafedry gosspital'noy terapii (zav. - prof. M.M. Vasilevskiy)  
Yaroslavskogo meditsinskogo instituta.  
(HEPATITIS, INFECTIOUS)

KOMONOV, S.G., inzh., red.; PEVZNER, A.S., zav.red.isd-va; MEL'NICHENKO, F.P., tekhn.red.

[Production norms for planning and survey work paid for according to a piece-rate system] Normy vyrabotki na proektnye i isyskatel'skie raboty, oplachivaemye sdel'no. Pt.34. [Planning the organization of building and assembly operations and special steel structures] Proektirovanie organisatsii stroitel'no-montaznykh rabot i spetsial'nykh stal'nykh konstrukttsii. Moskva. Gos.isd-vo lit-ry po stroit., arkhitekt. i stroit.materialam. 1958. 75 p. (MIRA 12:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

(Russia--Industries)

(Production standards)

KONONOV, S. I.

"Mine Plant", (bk) by Tilson, B. F. Reviewed by Kononov, S. I.  
Tsvet. Met. 14, No. 11-11, Oct.-Nov. 1939.

Report U-1506, 4 Oct. 1951.

KONONOV, S.I.

BAKIBTOV, A.K.; KONONOV, S.I.; SHANIN, N.I.

Mining equipment for open cut mining in foreign countries.  
Gor.shur. no.5:47-52 My '55. (MIRA 8:7)  
(Mining machinery) (Strip mining)



KAPLYANSKIY, A.Ye., doktor tekhn. nauk, prof. (Leningrad); DODOTCHENKO,  
V.V., inzh. (Leningrad); KONONOV, S.P., inzh. (Leningrad)

Magnetic plasma and ion flow motors and d.c. generators.

Elektrichestvo no.5:88-91 My '64.

(MIRA 17:6)

KONONOV, V. (Khabarovsk)

Radio receiver using P6V and P5G transistors. Radio no. 7:45  
J1 '62. (MIRA 16:6)

(Transistor radios)

YEMELIN, F., shakhter-pensioner, chlen Kommunisticheskoy Partii  
Sovetskogo Soyuza.; KONONOV, V., stroitel'-pensioner, chlen  
Kommunisticheskoy Partii Sovetskogo Soyuza.; BATAYEN, I.

As oldtimers see it now. Mast.ugl. 9 no.8:16-17 Ag '60.  
(MIRA 13:8)

1. Glavnyy vrach nochnogo profilaktoriya shakhty "Ob'yedini-  
nennaya." (for Batayen).

(Cheremkhovo Basin--Coal mines and mining)

KONONOV, V.

Struggling with difficulties. Prof.-told. obr. 1" no.1:18-19 Ja '61.  
(MIRA 14:2)

1. Sekretar' partiynogo byuro Uchilishcha mekhanizatsii sel'skogo  
khozyaystva No.14, Novosibirskaya oblast'.  
(Novosibirsk Province--Farm mechanization--Study and teaching)

KONONOV, V., starshiy leytenant

Use of ferrying and landing craft in flowing ice. Voen. vest.  
40 no. 3:91-93 Mr '61. (MIRA 14:2)

(Stream crossing, Military)  
(Ice on rivers, lakes, etc.)

KONONOV, V.

The Yakut A.S.S.R. is 40 years old. Pozh.delo 8 no.7:15 J1  
'62. (MIRA 15:8)

1. Zamestitel' predsedatelya Soveta Ministrov Yakutskoy ASSR.  
(Yakutia--Fire prevention)

AUTHOR: Kononov, V.A. SOV/21-58-10-2/27

TITLE: Some Topological Properties of Dynamic Systems with Invariant Measure (Nekotoryye topologicheskiye svoystva dinamicheskikh sistem s invariantnoy meroy)

PERIODICAL: Dopovidi Akademii nauk Ukraini's'koi RSR, 1958, Nr 10, pp 1038 - 1041 (USSR)

ABSTRACT: Although dynamic systems with invariant measure have been studied in detail in metrical respect, their topological structure has not been investigated. The present article handles some topological properties of such systems. It deals with the problem of behavior of the trajectory in an abstract dynamic system  $f(p,t)$  with an accuracy to a certain measure  $\nu$ . The author introduces the concept of the limiting trajectory which includes, in the case of a plane, isolated cycles. He assumes the existence of the invariant measure represented by the formula

$$\mu A = \int_A M(p) d\nu,$$

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where the function  $M(p)$  is everywhere positive with a possible exception of the points of  $\nu$ -measure equal to zero.

SOV/21-58-10-2/27

Some Topological Properties of Dynamic Systems with Invariant Measure

Then this function  $M(p)$  gives a criterion which makes it possible to define the limiting trajectory. There is one Soviet reference.

ASSOCIATION: Odesskiy gosudarstvennyy universitet im. I.I. Mechnikova  
(Odessa State University imeni I.I. Mechnikov)

PRESENTED: By Member of the AS UkrSSR, B.V. Gnedenko

SUBMITTED: May 15, 1958

NOTE: Russian title and Russian names of of individuals and institutions appearing in this article have been used in the transliteration

1. Functions--Theory 2. Topology

Card 2/2



KONONOV, V.<sup>6</sup>

Some topological properties of dynamic systems with an invariant measure. Pratsi Od. un. sbir. mol. vchen. un. 148 no.3:67-77 '58  
(MIRA 13:3)

1. Nauchnyy rykovoditel' - prof. M.I. Gavrilov [M.I. Havrylov].  
(Topology)

KONONOV, V. A., Cand Phys-Math Sci - (diss) "Some topological properties of dynamic systems with invariant measure." Odessa, 1960. 7 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Odessa State Univ im I. I. Mechnikov, Chair of Differential Equations); 236 copies; price not given; (KL, 19-60, 130)

S/080/62/035/012/002/012  
D444/D307

AUTHORS: Platkov, M.A., Illarionov, V.I., Kononov, V.A.,  
Kunin, K.V. and Evenchik, S.D.

TITLE: Separation of sulfur and selenium in packed and  
plate columns and the efficiencies

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 12, 1962,  
2620-2624

TEXT: The object of this work was to fill the lack of  
information on plate efficiency or the proportionality coefficient  
between a theoretical plate and unit height of packing. This infor-  
mation is needed for sulfur-selenium separation column design. The  
material used was sulfur containing 0.4% As, 0.03% Se, 0.02% Te,  
bitumen and ash; a Se-enriched variety (0.044% Se) was also used.  
It was found that one theoretical plate corresponds to 27 cm of  
packed column with a reflux number of 2.6 and 5 x 4.3 x 0.3 and  
7.8 x 8.5 x 0.3 mm packing. The efficiency of columns with 'sieve'  
and 'bubble-cap' plates was 6.5 and 0.31, respectively. With the  
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Separation of sulfur ...

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degrees of separation of sulfur and selenium obtained the tellurium goes into the distillate proportionately to the selenium, while arsenic goes into the residue. There are 2 figures and 4 tables.

SUBMITTED: September 7, 1961

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